



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/822,256 | 04/02/2001 | Derek Johnson | BS01-053 | 7274 |

28970 7590 09/02/2004

SHAW PITTMAN
IP GROUP
1650 TYSONS BOULEVARD
SUITE 1300
MCLEAN, VA 22102

EXAMINER

CUMMING, WILLIAM D

ART UNIT PAPER NUMBER

2683

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,256

Applicant(s)

JOHNSON & HEUBEL

Examiner

WILLIAM D CUMMING

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

2. The information disclosure statement filed November 1, 2001 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because dates are not listed on the PTO-1449. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicants are advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Specification

3. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the computer at the serving cell adapted to measure one or more of a signal strength and a bit error rate as stated by claim 16; a computer at a mobile telephone switching office (MTSO) adapted to measure one or more of a signal strength and a bit error rate as stated by claim 17; means for determining a position comprises a computer at the mobile telephone switching office (MTSO) as stated by claim 19; a computer adapted to determine which of a plurality of candidate cells is closest to the position as stated by claim 22 ; a computer adapted to determine which of a plurality of candidate cells best corresponds to the position vector as stated by claim 23; a computer adapted to determine which of a

plurality of candidate cells best corresponds to the velocity vector as stated by claim 24; a computer, the computer being adapted to generate an alert, wherein the alert indicates that the portable wireless device should be handed off from the serving cell to a target cell wherein the computer is further adapted to determine the target cell based on the position as stated by claim 27 and the location system comprises a mobile telephone switching office as stated by claim 28 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

7. INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 16, 17, 19, 22, 23, 24, and 27-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification inadequately describe the computer at the serving cell adapted to measure one or more of a signal strength and a bit error rate as stated by claim 16; a

computer at a mobile telephone switching office (MTSO) adapted to measure one or more of a signal strength and a bit error rate as stated by claim 17; means for determining a position comprises a computer at the mobile telephone switching office (MTSO) as stated by claim 19; a computer adapted to determine which of a plurality of candidate cells is closest to the position as stated by claim 22 ; a computer adapted to determine which of a plurality of candidate cells best corresponds to the position vector as stated by claim 23; a computer adapted to determine which of a plurality of candidate cells best corresponds to the velocity vector as stated by claim 24; a computer, the computer being adapted to generate an alert, wherein the alert indicates that the portable wireless device should be handed off from the serving cell to a target cell wherein the computer is further adapted to determine the target cell based on the position as stated by claim 27 and the location system comprises a mobile telephone switching office as stated by claim 28. The "*written description*" of the invention required by first paragraph of 35 USC §112 is separate and distinct from that paragraph's requirement of enabling disclosure, since description must do more than merely provide explanation of how to "*make and use*" the invention. Applicant must also convey, with reasonable clarity to those skilled in the art, that applicant, as of the filing date sought, was in possession of the invention, with the invention being, for purpose of "*written description*" inquiry, whatever is presently claimed. Drawings alone may, under proper circumstances, provide "*written description*" of the invention required by 35 USC §112, and whether the drawings are from design application or utility application is not determinative. In order to satisfy "*written description*" requirement of

35 USC §112, the proper test is whether drawings conveys, with reasonable clarity to those of ordinary skill in the art, the claim subject matter.

10. Claims 27-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to provide an enabling disclosure of the computer, the computer being adapted to generate an alert, wherein the alert indicates that the portable wireless device should be handed off from the serving cell to a target cell wherein the computer is further adapted to determine the target cell based on the position as stated by claim 27. This computer is not shown and where it is connected in the system.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

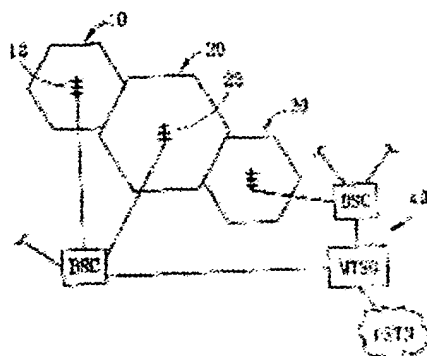
A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Elliott, et al show wherein the step of determining that a handoff is to be made is based on detecting that the signal strength of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has fallen below a threshold. (*FIG. 3 illustrates the signaling sequence used in prior art TDMA management and control systems to hand-off an active call of*

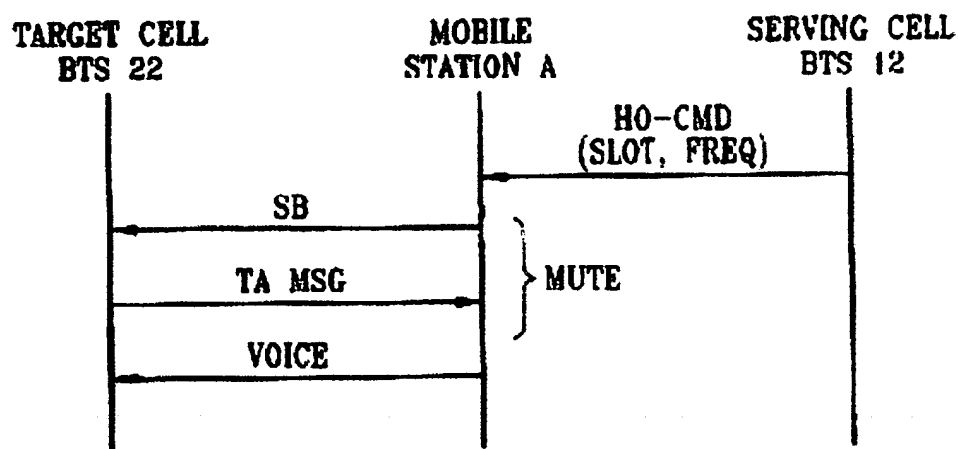
mobile station A from the serving cell 10 to the target cell 20. As the mobile station A approaches the boundary between the cells 10 and 20, a hand-off command (HO-CMD) is sent from the serving cell BTS 12 signaling the mobile station A to initiate a signaling sequence in short burst format with the target cell BTS 22. The hand-off command is triggered by a determination within the BSC or MTSO associated with the BTS 12 that the signal strength received by the BTS 12 or mobile station A has attenuated to a predetermined level. Information is sent from the serving cell BTS 12 to the mobile station A with the hand-off command, representing the time slot and frequency assignment for the traffic channel of mobile station A within the target cell 20.”)

FIG. 2



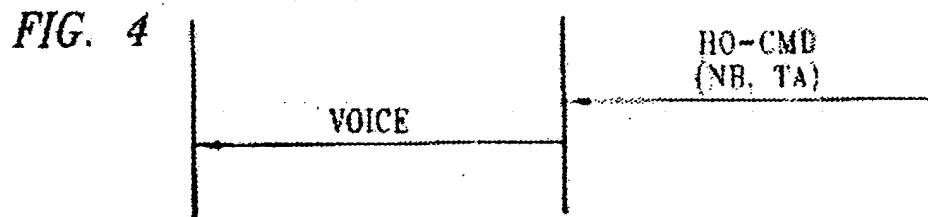
Elliott, et al teach the step of determining that a handoff is to be made is based on detecting that the bit error rate of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has exceeded a threshold ("Referring now to FIGS. 10, 11, 12, and 14, methods and means are illustrated for enhancing the quality of service, channel assignment and power level control over channels in a serving cell 200. Cell 200 is typical of

other cells and the wireless telecommunications network 40 and includes a BTS 220 and associated MTSO (not shown in FIGS. 10 through 14) which monitors all active channels in discrete time intervals or time-slots. After having served as the central office in completing a call setup, the associated MTSO continues to monitor the radio transmissions of mobile stations served within the cell 200 at prescribed intervals. Cell 200, preferably under the management and control of the associated MTSO, automatically and without substantial interruption, switches traffic and control channels used with mobile stations (not shown) served within the cell 200 to an idle or available channel previously experienced as having the highest quality of service, as defined by the network 40. The power level of transmissions to mobile stations served within the cell 200 is also increased or decreased to enhance the quality of service provided. Mobile stations receiving transmissions within the cell 200 provide information to the BTS 220 representing both the forward and reverse bit error rates (FBER and RBER) and power level of transmissions received. Such information is fed back to the BTS 220 by the mobile stations during active calls, via the traffic channel transmissions.")

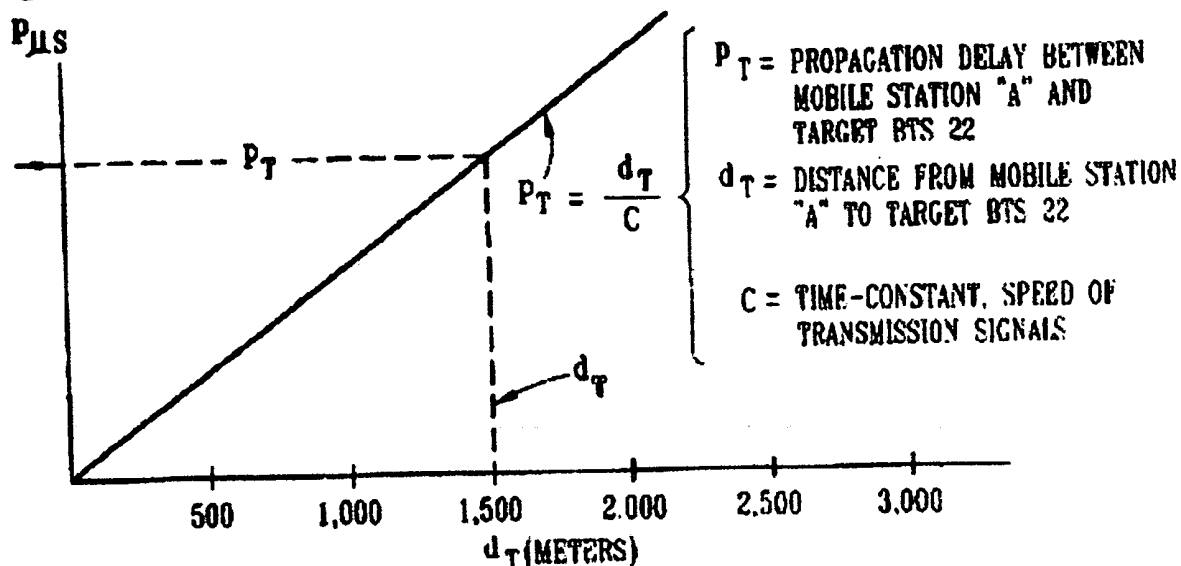
FIG. 3 PRIOR ART

Elliott, et al display the step of determining that a handoff is to be made is based on detecting that the signal strength of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has fallen below a first threshold and that the bit error rate of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) has exceeded a second threshold (*"Cell 200 is divided into sectors and S 1, S 2 and S 3, each of which in turn is sub-divided into a grid identifying a preselected number of quadrant locations within the sector in which information representing the power level, bit error rate received by a mobile station is stored in a matrix or array and suitable memory device or devices by the network 40. Development of such a grid of locations monitored within the cell 200 as shown with reference to sectors S 1, S 2 and S 3. Sector S 1 is shown prior to overlay of a location identifying grid. Sector S 2 is shown with a location identifying grid overlay, preferably with boundaries running parallel to the boundaries of sector S*

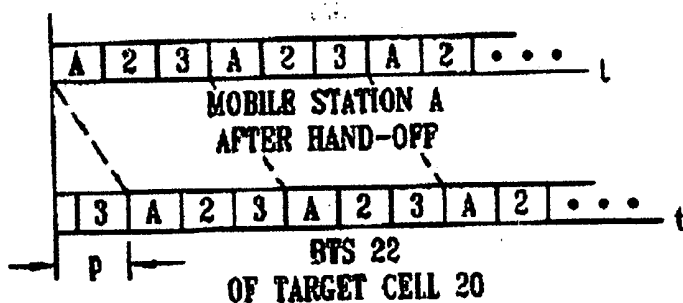
2 and the cell 200. Sector S 3 includes a grid overlay, with each grid location identified alphabetically. It will be apparent that the number and size of the grid locations and the corresponding area and number of locations monitored is selected to avoid excessive channel and power level adjustment yet capable of providing a sufficiently enhanced quality of service.”)



Elliott, et al disclose wherein the step of determining that a handoff is to be made is based on detecting that the signal strength of the transmission between the portable wireless device (#MOBILE STATION "A") and the serving cell (#10) is less than the signal strength of a transmission between the portable wireless device (#MOBILE STATION "A" and a candidate cell (#20).

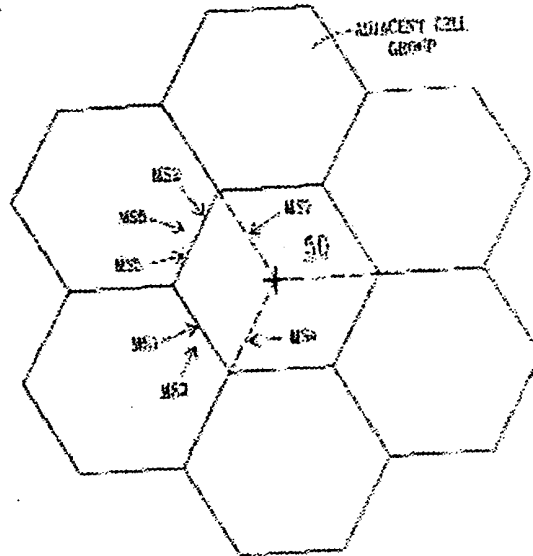
FIG. 5

Elliott, et al show the step of determining that a handoff is to be made is based on detecting that the bit error rate of the transmission between the portable wireless (#MOBILE STATION "A") device and the serving cell (#10) is greater than the bit error rate of a transmission between the portable wireless device (#MOBILE STATION "A") and a candidate cell (#20).

FIG. 6

Elliot, et al teach the step of assigning comprises handing off the portable wireless device (#MOBILE STATION "A") from the serving cell (#10) to the target cell (#20).

FIG. 7



Elliot, et al display the step of determination of a position is performed using one or more of the following methods: time difference of arrival (TDOA), angle of arrival (AOA), location pattern matching (LPM), and global positioning system (GPS) (*"Information representing at least the approximate location of mobile station A relative to the target BTS 22 at the time hand-off is triggered can be obtained by employing a number of available techniques. Preferably, location information will be obtained from a GPS receiver coupled to or co-located with mobile station A. One such mobile telephone, available from Garmin International, Inc. of Olathe, Kansas, operates with AMPS technology and includes a GPS receiver and transmits accurate location information in*

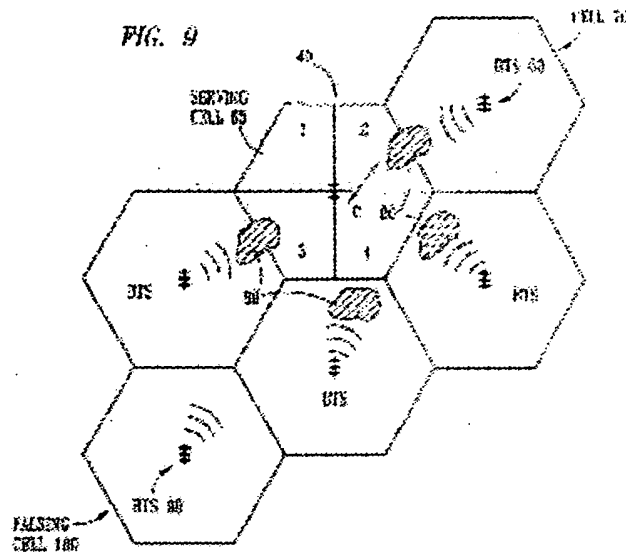
substantially real-time to an associated BTS. Short Message Service (SMS) available in IS-136 systems can also be used to transmit location information from mobile station A. Triangulation techniques, such as time delay of arrival, can also be utilized to assess the position of mobile station A as well. Other techniques will also be apparent to those skilled in art.")

FIG. 8

| MOBILE STATION CHANNEL ASSIGNMENT QUEUE | | |
|--|------|--------|
| PRIORITY | MOSE | SITEID |
| MS 4 | HIGH | HIGH |
| MS 2 | LOW | LOW |
| MS 5 | LOW | HIGH |
| MS 1 | HIGH | LOW |
| MS 7 | HIGH | LOW |
| MS 3 | LOW | HIGH |
| MS 6 | LOW | LOW |

Elliot, et al disclose the step of determining a target cell comprises which of a plurality of candidate cells is closest to the portable wireless device. ("Referring now to FIG. 9, methods and means are shown for eliminating incorrect identification of a channel during a hand-off, known as "falsing," utilizing information representing the location and direction of travel of a mobile station C. Mobile station C is shown engaged in an active call within a group of adjacent cells forming a portion of the wireless telecommunications network 40 schematically described and FIG. 2. Such falsing occurs in current IS-136 systems implementing Mobile Assisted Hand-off (MAHO) technology and could occur in other circumstances in which a mobile station seeks to monitor the power level of channels broadcast by an adjacent cell. During an MAHO hand-off, the mobile station C monitors the power level of control channels of adjacent

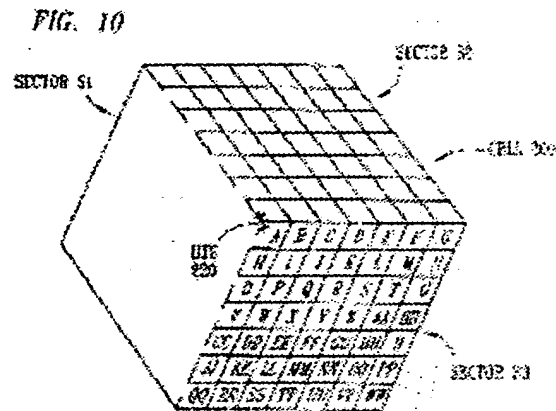
cells and sends such information to the management and control system of the network 40. Based on this information, the management and control system determines which of the adjacent cells is a preferred candidate to receive a hand-off of the call from the serving cell.”)



Elliot, et al disclose system for controlling operations in a cellular system (#40), comprising means for determining that a handoff is to be made for a portable wireless device (#MOBILE STATION "A") operating in a serving cell (#10) , wherein the portable wireless device (#MOBILE STATION "A") has a position. Means for determining the position of the portable wireless device (#MOBILE STATION "A") and means for determining a target cell (#20) based on the position.

Elliot, et al disclose means for assigning the portable wireless device (#MOBILE "A") to the target cell (#20).

Elliot, et al show means for assigning comprises the mobile telephone switching office (#MTSO), the MTSO being adapted to send a command though the serving cell (#10) for the portable wireless device to switch to the target cell (#20).



Elliot, et al teach a system for controlling operations in a cellular system (figure 2), comprising a location system (#40) adapted to determine a position of a portable wireless device (#MOBILE STATION "A"), wherein the portable wireless device is operating in a serving cell (#10) and a computer, the computer being adapted to generate an alert, wherein the alert indicates that the portable wireless device (#MOBILE STATION "A") should be handed off from the serving cell to a target cell (#20). Wherein the computer is further adapted to determine the target cell (#20) based on the position (*"Data or other information representing the location of the target BTS 22, preferably as well as the BTS of other cells in the network 40, is readily available for inclusion in a database, look-up table or other suitable memory resident in a data processor or distributed processing system of the management and control system of the network 40."*)

The location determination first calculates or obtains from a memory source the propagation distance dt of transmissions from the mobile station A to the target and BTS 22. Information representing dt is then used to determine the propagation delay P , using the formula: $P=dt/c$, where c is a time-constant representing the speed of transmission signals." And "FIG. 5 illustrates determination of the propagation delay P_t of the mobile station A by the management and control system with respect to the target cell 20 of the wireless telecommunications network 40, utilizing information representing the position of mobile station A. This propagation delay P_t , or time delay of arrival, can be converted by one or more data processors of the management and control system to time alignment units that are communicated to the mobile station A along with a hand-off command during the hand-off. Information representing the time alignment is specified in units of half-symbols.")

FIG. 11

240

MATRIX

| | | CHANNELS | | | | |
|-----------|-----|--------------------------|-----|-----|-----|-----|
| | | 1 | 2 | 3 | ... | D |
| QUADRANTS | A | Q1=5.0 P1=3 NEXT=3 | ... | ... | | ... |
| | B | ... | ... | ... | ... | ... |
| | C | ... | ... | ... | ... | ... |
| | D | ... | ... | ... | ... | ... |
| | ... | ... | ... | ... | ... | ... |
| | WW | ... | ... | ... | ... | ... |

Elliot, et al disclose location system (#40) comprises a mobile telephone switching office (#MTSO).

FIG. 12

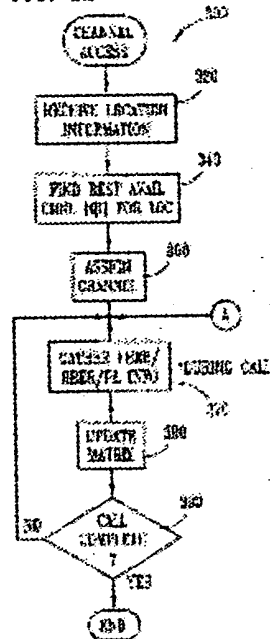
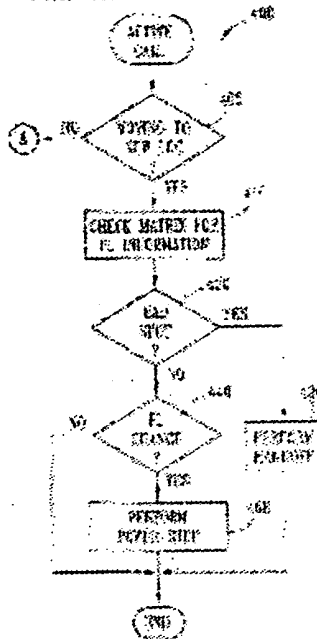


FIG. 13



Elliot, et al disclose a method (Figures 12-14) for controlling operations in a cellular system (figure 2), comprising determining a position of a portable wireless device (#MOBILE STATION "A") operating in a serving cell (#10). Determining that a handoff is to be made for the portable wireless device (#MOBILE STATION "A") based on the position. Determining a target cell (#20) and assigning the portable wireless device (##MOBILE STATION "A") to the target cell (#20).

Elliot, et al show step of determining that a handoff is to be made comprises generating a handoff alert because the portable wireless device (#MOBILE STATION "A") is at or is approaching a boundary of the serving cell (#20).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 9, 10, 12, 13, 20, 21, 23, 24, 33, and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over **Elliot, et al** in view of **King, et al**

Elliot, et al disclose all subject matter, note the above paragraph, except for the velocity and position to be vectors. **King, et al** is one of many examples that use position and velocity as vectors (*"FIG. 9 illustrates the mathematical processing required for computing the second order curve fit parameters for use by the mobile station 304 in the radio communication system of FIG. 300. The position vector and velocity vector data are provided to the process 704 (FIG. 7) to compute the second order curve fit vector constants, $X_{sub.0}$, $V_{sub.0}$, $V_{sub.1}$, $V_{sub.2}$. Further, the clock correction data received at the base station processor 506 is provided to a third group of software instructions 706. These instructions 706 compute the clock correction terms C and $af1$."*) in a method and system for controlling operations in a cellular system for the purpose of location determination in a radio communication system. Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the velocity and position as vectors, as taught by **King, et al**, in the method and system for controlling of in a cellular system of **Elliot, et al** in order for location determination of a mobile station in a fixed radio communication system having at least one base station that reduces the computational load on the mobile station.

Raith teaches the use of geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific rod in the cellular coverage area (figures 3 and 8) for the purpose of once a route has been defined and the path of the mobile terminal has been determined to correspond to the route, the network may monitor handoffs occurring along the defined route under other optional aspects.

Hence, it would have been obvious for one of ordinary skill in the art at the time the claimed invention was made to incorporate the use of geographic representation of the cellular coverage area in order to ascertain that the portable wireless device is traveling on a specific rod in the cellular coverage area, as taught by **Raith**, in the method and system for controlling operations in a cellular system of **Elliot, et al** in order to store routes in memory that can be used to avoid multiple handoffs.

18. Claims 16, 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Elliot, et al** in view of **Barnes, et al** or **Chambert**.

Elliot, et al disclose all subject matter, note the above paragraph, except explicitly showing computers in the cell site or at the mobile telephone switching office. Computers in cell sites and in mobile telephone switching offices is old and well known in the art and the examiner takes Official Notice as such. The examiner provides **Barnes, et al** and **Chambert** as evidence as such. Hence, it would have been very obvious, if not expected, to one of ordinary skill in the art at the time the claimed invention was made to incorporate the use of computers in the cell sites and mobile switching offices in the method and system for controlling operations in a cellular system of **Elliot, et al** in order to calculate the values for handoffs.

Conclusion

19. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Menich, et al disclose a method of selecting handover targets for a communication unit exchanging a communicated signal through a serving base site in a digital cellular system. The method uses timing advance to determine a relative distance of a communication unit to the serving base site. The method comprising the steps of comparing a timing advance value with a first threshold. The first threshold may be equal to a distance one and one-half times the radius of the serving cell. When the timing advance value exceeds the first threshold, a base site frequency list is modified to include base sites non-adjacent the serving base site. The identity of the non-adjacent base sites may be determined from the directionality of the communication unit. The method further includes the step of selecting a handover target providing a highest relative RSSI value to the communication unit from the modified base site frequency list.

Brown, et al show a dynamic constellation (C) of satellites (S). The present invention is capable of offering continuous voice, data and video service to customers across the globe on the land, on the sea, or in the air. The preferred embodiment of the invention comprises a low Earth orbit satellite system that includes 40 spacecraft (S) traveling in each of 21 orbital planes at an altitude of 700 km (435 miles). This relatively large number of satellites employed by the preferred embodiment was selected to provide continuous coverage of the

Earth's surface at a high minimum mask angle (1230a) of forty degrees. Each of the individual 840 spacecraft (S) functions as an independent sovereign switch of equal rank which knows the position of its neighbors, and independently handles traffic without ground control. The satellites (S) are capable of transporting calls to millions of customers using portable (P), mobile (M) and fixed (F) residential and business terminals, and gateways (G) to public phone networks. The constellation uses the 20 and 30 GHz frequency bands for communications between Earth and the constellation (C), and the 60 GHz band for communicating among the satellites (S). The present invention is designed to support in excess of 2,000,000 simultaneous connections, representing over 20,000,000 users at typical business usage levels, and over 350 billion minutes of use per year. Only a system such as the preferred embodiment, which utilizes 840 satellites at a preferred minimum mask angle of forty degrees, can accomplish these challenging objectives.

20. All Electronic Copies of Patent Application Records Will Now Be Provided as Certified Copies in Electronic Form

The United States Patent and Trademark Office (USPTO) is changing to an electronic format for the electronic certified copies it supplies of 1) U.S. patent applications as filed, and 2) U.S. patent-related file wrappers and contents. Copies of U.S. patent application documents made from the USPTO's Image File Wrapper (IFW) electronic system will be provided entirely in electronic form and will always be provided as certified copies. In addition, certified copies of patent application documents will no longer be bound, regardless of whether produced from IFW or a paper file.

For the last two years certified copies of large patent application files produced from the USPTO's electronic systems have been provided only on compact disc, with an attached paper certification statement. Currently, certified copies of patent applications as filed of 400 or more pages and all certified File

Wrapper copies produced from IFW are provided on compact disc (CD), both with attached paper certification statements. The \$200 fee for a file wrapper and contents was effectively waived and replaced by a \$55 fee when the application contents are provided on CD. See Copies of File Contents Available on Compact Disc Partial Waiver of 37 CFR 1.19(b), 1278 Off. Gaz. Patent Office 261 (Jan. 27, 2004). The fee for an application as filed remains \$20, as set forth in 37 CFR 1.19(b)(1), even when the copy is provided on compact disc.

Effective July 30, 2004, all copies of patent documents purchased under 37 CFR 1.19 and produced from IFW will be provided only as electronic files, with an imaged certification statement included as part of a digitally signed PDF (portable document format) file containing TIFF (tag image file format) images of the document pages. These electronic files may be downloaded from the USPTO website or provided by the USPTO on compact disc. The electronic files are digitally signed by the USPTO for authenticity and integrity, and cannot be undetectably modified. As mentioned above, all copies purchased pursuant to 37 CFR 1.19 and produced from IFW will be produced only as certified copies. Uncertified copies may be downloaded under the USPTO's Public PAIR system.

Before submitting electronic certified copies of the application as filed supplied on CD or in another electronic form to intellectual property offices under Article 4 of the Paris Convention for the Protection of Industrial Property applicants should inquire whether that office accepts priority documents in electronic form. Although the USPTO provides a certified copy in electronic form, applicants may print the certified copies to paper if required by the intellectual property office to which it is submitted.

The USPTO is actively engaging in discussions with other intellectual property offices for the mutual acceptance of electronic priority documents. **Should another intellectual property office not accept a paper or electronic certified copy of a patent application as filed as described in the above paragraph, upon presentation of a notice of non-acceptance by the other office, the USPTO will provide a substitute paper copy with a letter signed by an official of the USPTO addressed to the foreign office indicating that the certified copy of the application as filed is to be accepted under Article 4 of the Paris Convention for the Protection of Industrial Property.** Since the USPTO will no longer bind or rivet paper certified copies of patent applications as filed or file wrappers and contents, copies produced by the Office will be identical to copies printed by an applicant from the electronic certified

21. Elimination of Post Office Box in Arlington, Virginia for Patent Related Correspondence

Effective immediately, the Office will cease accepting patent-related correspondence addressed to the P.O. Box 2327 Arlington, VA 22202. Effective May 1, 2003, pursuant to 37 CFR 1.1, patent-related correspondence should have been addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Accordingly, as of May 1, 2003, the provisions of 37 CFR 1.8 (Certificate of Mailing) and 1.10 (Express Mail certificate) that were waived by the Office were no longer waived for correspondence addressed to P.O. Box 2327, Arlington, VA 22202.

In November of 2001, the Office established a Post Office Box in Arlington, Virginia (P.O. Box 2327, Arlington, VA 22202) for use on an emergency basis, and indicated that the Office would continue to accept patent-related correspondence at this Arlington, Virginia Post Office Box and treat such correspondence as if it were addressed as set forth in 37 CFR 1.1 for purposes of 37 CFR 1.8 and 1.10 until further notice. On March 25, 2003, the Office provided notice that persons submitting correspondence to the Office should no longer use the Arlington, Virginia Post Office Box for any correspondence (including sequence listings in electronic format) after May 1, 2003. See Correspondence with the United States Patent and Trademark Office, 68 Fed. Reg. 14332 (March 25, 2003).

Correspondence in patent-related matters to organizations reporting to the Commissioner for Patents must be addressed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Appropriate mail stops should also be used. See the notice titled "Special Mail Stops For Patent Mail" that is published each week in the Official Gazette Notices and posted on the USPTO Internet web site.

Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center (formerly the Patent Assistance Center (PAC)) by telephone at 800-786-9199 or 703-308-4357. **OG Notices: 29 June 2004**

22. If applicants wish to request for an interview, an *"Applicant Initiated Interview Request"* form (PTOL-413A) should be submitted to the examiner prior to the interview in order to permit the examiner to prepare in advance for the interview and to focus on the issues to be discussed. This form should identify the participants of the interview, the proposed date of the interview, whether the interview will be personal, telephonic, or video conference, and should include a brief description of the issues to be discussed. A copy of the completed *"Applicant Initiated Interview Request"* form should be attached to the Interview Summary form, PTOL-413 at the completion of the interview and a copy should be given to applicant or applicant's representative.

23. New Address for Customer Window Which is Used for Patent Mail Not Delivered by the USPS

Effective June 5, 2004, street addresses for several of the buildings of the United States Patent and Trademark Office (USPTO), including the Crystal Plaza Two building which is the location of the Customer Window, have been changed. The Customer Window is the delivery location for patent-related correspondence to be hand or courier delivered to the USPTO by delivery services such as FedEx, UPS, DHL, Laser, Action, Purolator, etc. The customer window is not used for correspondence delivered by the United States Postal Service (USPS). This change is made because the street on which the Crystal Plaza Two building is located will be redesignated from South Clark Place to 20th Street S.

Patent-related correspondence sent through the USPS should continue to be directed to the addresses set forth in 37 CFR 1.1 (revised effective January 21, 2004) (e.g., P.O. Box 1450, Alexandria, VA 22313-1450). The change in the street address for the Crystal Plaza Two building which houses the Customer Window does not affect the Mail Stop designations, which should always be used for certain patent mail.

Although the physical location of the Customer Window (the building and room number) will remain the same, on June 5, 2004 the street address of the Crystal Plaza Two building will change from 2011 South Clark Place to 220 20th Street S. Accordingly, effective June 5, 2004, patent mail delivered by hand or delivery services to the Customer Window (and not the

USPS) must be addressed as follows:

U.S. Patent and Trademark Office
220 20th Street S.
Customer Window, Mail Stop _____
Crystal Plaza Two, Lobby, Room 1B03
Arlington, VA 22202

During business hours, correspondence for international patent applications may be brought directly to the PCT Operations Receptionist on the 8th floor of the Crystal Plaza 2 building.

Also effective June 5, 2004, will be changes in the street addresses of three other USPTO buildings in the Crystal City complex. The street address changes are as follows: the Crystal Plaza Three building will be 2100 Crystal Drive; the Crystal Plaza Four building will be 2200 Crystal Drive; and the Crystal Square Two building will be 1550 Crystal Drive. These changes should be noted in case interviews with examiners in those buildings will be held after June 5, 2004.

Please be aware that the new address for the Customer Window is only temporary. In August or September of 2004, the Customer Window will be moving to the Alexandria campus. At that time, the address for patent mail delivered by hand or delivery services to the Customer Window (and not the USPS) will be changed yet again to a new Customer Window located on the Alexandria campus. A separate notice will be published in advance of the Customer Window relocation announcing specific details. The Customer Window location change planned for August or September will also have no effect on the USPTO address for mail delivered by the USPS.

The File Information Unit (also known as the Record Room) is scheduled to move to South Tower in July of 2004.

PCT Operations will be moving to South Tower in November or December of 2004. A separate notice will be published in advance of the PCT Operations relocation announcing specific details.

Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center (formerly the Patent Assistance Center (PAC)) by telephone at (800)786-9199, or (703)308-4357. **OG Notices: 01 June 2004**

24. USPTO to Provide Electronic Access to Cited U.S. Patent References with Office Actions and Cease Supplying Paper Copies**Summary**

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phase-in of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and U.S. patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications under the PCT during the international stage.

Deployment of E-Patent Reference System

The USPTO will deploy the full E-Patent Reference program starting in June of 2004. In accordance with the schedule shown below, paper copies of cited U.S. patents and U.S. patent application publications will cease to be mailed to applicants with Office actions in the indicated Technology Centers (TCs). Paper copies of foreign patents and non-patent literature will continue to be included with office actions.

Schedule

| | |
|---------------------------|---------------------------------|
| June 2004 | TCs 1600, 1700, 2800 and 2900 |
| July 2004 | TCs 3600 and 3700 |
| <u>August 2004</u> | <u>TCs 2100 and 2600</u> |

Description of E-Patent Reference System

On December 1, 2003, the Office made available a new feature in the Office's Private PAIR system, E-Patent Reference, to allow convenient downloading and printing of cited U.S. patents and U.S. patent application publications. A notice announcing this system was published in the Official Gazette, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The same notice also announced the Office's future plan to cease supplying copies of cited U.S. patents and patent application publications with Office actions.

The E-Patent Reference system allows an authorized user of Private PAIR to download the U.S. patents and U.S. patent application publications cited on a form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants as part of an information disclosure statement (IDS) on form PTO/SB/08 (1449). The retrieval of some or all of the documents is performed in one downloading step with each of the documents encoded as Adobe Portable Document format (.pdf) files.

The E-Patent Reference system was used by applicants during a pilot program in December 2003 and January 2004. In response to some technical issues discovered by users, changes to make the system more compatible with users' firewalls and office systems were made during the pilot.

Consequently, applicants should expect to start receiving Office actions (in patent applications and during patent reexamination proceedings) without paper copies of cited U.S. patents and U.S. patent application publications in accordance with the schedule above. These documents will be available through the E-Patent Reference system for downloading using Private PAIR. Foreign patents and non-patent literature will continue to be provided to the applicant on paper. Communications from the Office during the international stage of an international application under the PCT will continue to include paper copies of all references, including U.S. patents and U.S. patent application publications.

In summary, all U.S. patents and patent application

publications are available on the USPTO web site, from the Office of Public Records and from commercial sources. Additionally, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible.

Steps to Use the E-Patent Reference Feature

Access to Private PAIR is required to utilize E-Patent Reference. If you do not already have access to Private PAIR, the Office urges practitioners and applicants not represented by a practitioner to: (1) obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate; (2) obtain a USPTO customer number; (3) associate all of their pending and new application filings with their customer number; (4) install free software (supplied by the Office) required to access Private PAIR and the E-Patent Reference; and (5) make appropriate arrangements for Internet access.

Instructions for performing the 5 steps:

Step 1: Full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at: <http://www.uspto.gov/ebc/downloads.html>. Note that a notarized signature will be required to obtain a digital certificate.

Step 2: To get a Customer Number, download and complete the Customer Number Request form, PTO-SB/125, at: <http://www.uspto.gov/web/forms/sb0125.pdf>. The completed form can then be transmitted by facsimile to the Patent Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or agent, then your registration number must be associated with your customer number. This association is accomplished by adding your registration number to the Customer Number Request form.

Step 3: A description of associating a customer number with the correspondence address of an application is described at the EBC Web page at:

http://www.uspto.gov/ebc/registration_pair.html.

Step 4: The software for electronic filing is available for downloading at www.uspto.gov/ebc. Users can also contact the EFS Help Desk at (703) 305-3028 and request a copy of the software on compact disc. Users will also need Adobe Acrobat Reader, which is available through a link from the USPTO web site.

Step 5: Internet access will be required which applicants may obtain through a supplier of their own choice. As images of large documents must be downloaded, high-speed Internet access is recommended.

The E-Patent Reference feature is accessed using a button on the Private PAIR screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents in the Portable Document Format (.pdf). The downloaded documents can be viewed and printed using Adobe's Acrobat Reader program and other software.

Other Options

The E-Patent Reference function requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (<http://www.uspto.gov/patft/index.html>). The USPTO's Office of Public Records also supplies copies of patents and patent application publications for a fee (<http://ebiz1.uspto.gov/oems25p/index.html>). Commercial sources also provide patents and patent application publications.

Section 707.05(a) of the Manual of Patent Examining Procedure, which currently provides that copies of cited references are in general automatically furnished without charge to applicant together with the Office action in which they are cited, will be revised in due course for consistency with the practice announced in this notice.

Comments

The Office published a notice announcing its plan to cease supplying copies of cited U.S. patent references with Office actions, (see Notice of Office Plan to Cease Supplying Copies of Cited U.S. Patent References With Office Actions, and Pilot to Evaluate The Alternative of Providing Electronic Access to Such U.S. Patent References, 1277 Off. Gaz. Pat. Office 156 (Dec. 23, 2003)). The Office received numerous comments in response to this notice. A summary of representative comments and the Office's responses to the comment, grouped by topics, follows:

Comment 1: The requirement to use the Office's customer number/digital certificate shifts the responsibility of producing paper copies to the applicant. A number of comments indicated that adopting the proposal would result in an increased responsibility for the applicant, as the applicant or applicant's representative would be required to print the references.

Response: The USPTO is implementing the E-Patent Reference program as part of the Office's e-Government initiative and to align funding priorities to the Patent Initiatives, including the hiring of examiners. Applicants can purchase copies of U.S. patents and patent application publications from a variety of vendors if they choose not to print copies through the E-Patent Reference system.

The USPTO is moving toward electronic filing and processing of both patent applications and trademark applications. The policy announced in this notice is simply a step towards a more fully automated patent examination process. By analogy, briefs and court opinions that include case citations do not include paper copies of the cited cases. Rather, the cited cases are available via books or electronic databases. Similarly, the USPTO will no longer provide paper copies of U.S. patents and patent application publications since they are available electronically free of charge. Finally, this change will avoid duplication and waste since an applicant may not need to print out every page of a cited U.S. patent or patent application publication.

Comment 2: Adopting the proposal would hurt the solo practitioners and pro se applicants the most, which is unfair.

Response: The solo practitioners and pro se

applicants have the same electronic access as the larger firms and corporations, available instantaneously over the Internet. If a solo practitioner or a pro se applicant chooses not to print copies of U.S. patents and patent applications publications through the USPTO Patents on the Web system or through the E-Patent Reference system, commercial sources that provide patents very quickly and inexpensively are available, and copies of U.S. patents and patent application publications are also available at the Patent and Trademark Depository Libraries (PTDLs). Additionally, the cost of patents if ordered from the USPTO Office of Public Records is very reasonable (\$3).

Comment 3: Some applicants indicated that the service is reliable and quick, and consistent with the electronic commerce initiatives in their law firms and businesses.

Response: As pointed out by some respondents, electronic copies of the references are very usable, available without mail delays, and capable of being sent to clients, other attorneys and experts by electronic means.

Comment 4: The statute 35 USC Sec. 132 requires the Office when sending a rejection to state the reasons "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of his application".

Response: The requirement that an Office action contain "such information and references as may be useful in judging of the propriety of continuing the prosecution of his application" was added to the patent laws in the Patent Act of 1870. The circumstances surrounding this provision reveal that it requires that an Office action identify the prior inventions or patents that are relied upon in making a rejection, not that it requires that an Office action be accompanied by copies of the cited references. The USPTO did not even begin providing copies of cited references with Office actions until 1965, when 35 U.S.C. Sec. 41 was amended to authorize (but not require) the USPTO to provide copies of patents cited in Office actions without charge. See 35 U.S.C. Sec. 41(e) ("[t]he Director may provide any applicant issued a notice under [35 U.S.C. Sec. 132] with a copy of the specifications and drawings for all patents referred to in that notice without charge") (emphasis added). Nevertheless, the Office will provide access to U.S. patents and patent application publications, albeit not in paper form.

Comment 5: A number of users suggested that the Office provide paper references at an extra cost.

Response: The Office of Public Records does offer that service, at a reasonable cost, and it is available through a number of delivery channels. See 37 CFR 1.19 (a). Commercial services also provide U.S. reference documents, in person, by mail, and over the Internet.

Comment 6: Some comments indicated that the length of the pilot should have been expanded.

Response: E-Patent Reference system will continue through the end of May to allow applicants to become familiar with E-Patent Reference and to be sure all technical concerns are addressed.

For Further Information Contact

Questions concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the Patent EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov. Questions about this notice may be directed to Jay Lucas, at Jay.Lucas@uspto.gov and Rob Clarke, at Robert.Clarke@uspto.gov. **OG Notices: 18 May 2004**

25. Patent Application Publications May Now Include Amendments

As a consequence of the use of Image File Wrappers (IFW), the United States Patent and Trademark Office (Office) has begun to publish patent applications with amendments that expedite the publication process. For example, the patent application publication may be based upon amendments to the specification that are reflected in a substitute specification, an amendment to the abstract, amendments to the claims that are reflected in a complete claim listing, and amendments to the drawings that are reflected in replacement drawing sheets, provided that such substitute specification or amendment is submitted in sufficient time to be entered into the application file wrapper before technical preparations for publication of the application have begun. Technical preparations for publication of an application generally begin between fourteen and nine weeks prior to the projected date of publication (the projected publication date is indicated on the filing receipt for the patent application). Accordingly, the provisions 37 CFR 1.215(a) are waived to the extent that they are inconsistent with this

change in practice. 37 CFR 1.215(a) will be revised consistent with this change in practice, when the rule changes proposed in Changes To Support Implementation of the United States Patent and Trademark Office 21st Century Strategic Plan, 68 Fed. Reg. 53816 (Sept. 12, 2003), 1275 Off. Gaz. Pat. Office Notices 23 (Oct 7, 2003) are made final.

Although the Office has begun to include amendments in patent application publications, applicants desiring to ensure that a patent application publication reflects an amendment should submit the application, as amended, through the Electronic Filing System (EFS). See 37 CFR 1.215(c). See also Helpful Hints Regarding Publication of Patent Applications, 1249 Off. Gaz. Pat. Office Notices 83 (August 21, 2001). In addition, if the application is not maintained in an IFW, and the amended application is not submitted through EFS, a petition under 37 CFR 1.182 will continue to be necessary for certain drawings to be included in the patent application publication. See Manual of Patent Examining Procedure, Section 507 (8th ed. 2001, rev. 1, Feb. 2003).

General questions regarding publication of patent applications should be directed to the Customer Service Center, Office of Patent Publication, by telephone at (703) 305-8283. Questions regarding the Electronic Filing System should be directed to (703) 305-3028. Questions of a legal nature should be directed to the Office of Patent Legal Administration at (703) 308-6906. **OG Notices: 13 April 2004**
Oversized Postcards Must Be Submitted With Sufficient Postage

26. Recently, a number of return receipt postcards have been returned to the U.S. Patent and Trademark Office (Office) because the postcards contained insufficient postage for an oversized postcard. Oversized postcards require First-Class letter postage. Customers are reminded that they are solely responsible for placing the proper postage on self-addressed postcards that are submitted to the Office for the purpose of obtaining a receipt for correspondence being filed in the Office.

Customers should be aware of the following guidance from the USPS regarding postage and acceptability for postcards:

1. In order to be eligible for the First-Class Mail card rates (currently \$0.23 per card, domestic delivery), cards must be of uniform thickness and made of unfolded and uncreased paper or card stock of approximately the quality and weight of a Postal Service stamped card.

Cards claimed at the First-Class postcard rate must be:

- (a) Rectangular;
- (b) No less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick; and
- (c) No more than 4-1/4 inches high, 6 inches long, and 0.016 inch thick.

2. Cards that measure more than 4-1/4 inches high, 6 inches long, or 0.016 inch thick are charged postage at the First-Class Mail letter rates.

3. Cards that measure less than 3-1/2 inches high, 5 inches long, and 0.007 inch thick are nonmailable.

Any return receipt postcard that does not contain sufficient postage or is not acceptable may not be delivered by the United States Postal Service (USPS) to the address provided on the postcard, and, if returned to the Office, may be discarded.

For information regarding the Office's postcard receipt practice in patent-related matters, see Manual of Patent Examining Procedure (MPEP) (8th Ed., Rev. 1, Feb. 2003), Section 503. Questions regarding sufficient postage for postcards should be directed to the United States Postal Service. Questions regarding this notice may be e-mailed to PatentPractice@uspto.gov, or directed to the Inventors' Assistance Center by telephone at (800)786-9199, or (703)308-4357. **OG Notices: 29 June 2004**

27. SPECIAL MAIL STOPS FOR PATENT MAIL

Revisions have been made to the list of mail stops. The mail stops that **should no longer be used** are: Mail Stop Application Number, Mail Stop CPA, Mail Stop Design, Mail Stop Non-Fee Amendment, Mail Stop PGPUB-ABD, Mail Stop Patent Application, and Mail Stop Provisional Patent Application. Mail Stop Non-Fee Amendment has been changed to Mail Stop Amendment. In addition, Mail Stop PGPUB-ABD has been changed to Mail Stop Express Abandonment and all requests and petitions for an express abandonment under 37 CFR 1.138 should be directed to Mail Stop Express Abandonment or transmitted by facsimile to 703-305-8568. Lastly, Mail Stop L&R and Mail Stop Post Issue have been established.

For most correspondence (e.g., new patent applications) no mail stop is required because the processing of the correspondence is routine. **If NO mail stop**

is included on the list below, then NO mail stop is required for the correspondence. Special mail stop designations should only be used for particular types of mail that may be forwarded to the appropriate area without being opened, or that may be processed with the remaining mail. Only the specified type of document should be placed in an envelope addressed to one of these special mail stops. If any documents other than the specified type identified for each special mail stop are addressed to that mail stop, they will be significantly delayed in reaching the appropriate area for which they are intended. The mail stop should generally appear as the first line in the address.

Petitions for a foreign filing license may be faxed to: 703-305-7658.

Some correspondence may be submitted electronically. See the Office's Internet Web site <http://www.uspto.gov> for additional information.

Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Mail Stop _____

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Except correspondence for Maintenance Fee payments, Deposit Account Replenishments (see 1.25(c)(4)), and Licensing and Review (see 37 CFR 5.1(c) and 5.2(c)), please address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, etc.) as follows:

U.S. Patent and Trademark Office

220 20th Street South

Customer Window, Mail Stop _____

Crystal Plaza Two, Lobby, Room 1B03

Arlington, VA 22202

Note: The Customer Window will be moving to the new Alexandria location in August or September of 2004.

Mail Stop Designations

Explanation

Mail Stop 12

Contributions to the Examiner Education Program.

Mail Stop 313(c)

Petitions under 37 CFR 1.313(c) to withdraw a patent application from issue after payment of the issue fee and any papers associated with the petition, including papers necessary for a continuing application or a request for continued examination (RCE).

| | |
|--------------------------------|---|
| Mail Stop AF | Amendments and other responses after final rejection, other than an appeal brief. |
| Mail Stop Amendment | Information disclosure statements, drawings, and replies to Office actions in patent applications with or without an amendment to the application or a terminal disclaimer. (Use Mail Stop AF for replies after final rejection.). |
| Mail Stop Appeal Brief-Patents | For appeal briefs under 37 CFR 1.192 or reply briefs under 37 CFR 1.193(a). |
| Mail Stop Comments-Patents | Public comments regarding patent related regulations and procedures. |
| Mail Stop Conversion | Requests under 37 CFR 1.53(c)(2) to convert a nonprovisional application to a provisional application and requests under 37 CFR 1.53(c)(3) to convert a provisional application to a nonprovisional application. |
| Mail Stop DD | Disclosure Documents or materials related to the Disclosure Document Program. (A disclosure document is NOT an information disclosure statement.) Instead of filing a disclosure document, inventors are encouraged to file a provisional patent application. |
| Mail Stop EBC | Mail for the Electronic Business Center including: Certificate Action Forms, Request for Customer Numbers, and Requests for Customer Number Data Change (USPTO Forms PTO-2042, PTO/SB/124A and 125A, respectively) and Customer Number Upload Spreadsheets and Cover Letters. |
| Mail Stop Expedited Design | Only to be used for the initial filing of design applications accompanied by a request for expedited examination under 37 CFR 1.155. (Design applicants seeking expedited examination may alternatively file a design application and corresponding request under 37 CFR 1.155 by hand-delivering the application papers and request directly to the Design Group Director's office.) |
| Mail Stop Express Abandonment | Requests for abandonment of a patent application pursuant to 37 CFR 1.138, including any petitions under 37 CFR 1.138(c) to expressly abandon an application to avoid publication of the application. |

(This new mail stop should be used instead of Mail Stop PGPUB- ABD. Applicants are encouraged to transmit the requests by facsimile to (703) 305-8568.))

| | |
|-------------------------|--|
| Mail Stop ILS | Correspondence relating to international patent classification, exchanges and standards. |
| Mail Stop Issue Fee | All communications following the receipt of a PTOL-85, "Notice of Allowance and Fee(s) Due," and prior to the issuance of a patent should be addressed to Mail Stop Issue Fee, unless advised to the contrary. Assignments are the exception. Assignments (with cover sheets) should be faxed to 703-306-5995, electronically submitted, or submitted in a separate envelope and be sent to Mail Stop Assignment Recordation Services, Director - U.S. Patent and Trademark Office as shown below. |
| Mail Stop L&R | All documents pertaining to applications subject secrecy order pursuant to 35 U.S.C. 181, or are national-security classified and required to be processed accordingly. Such papers may also be hand carried to: Technology Center 3600, Office of the Director 2451 Crystal Drive, Room 3D07 Arlington, VA 22202 |
| Mail Stop Missing Parts | Requests for a corrected filing receipt and replies to OIPE notices such as the Notice of Omitted Items, Notice to File Corrected Application Papers, Notice of Incomplete Application, Notice to Comply with Nucleotide Sequence Requirements, and Notice to File Missing Parts of Application, and associated papers and fees. |
| Mail Stop MPEP | Submissions concerning the Manual of Patent Examining Procedure. |
| Mail Stop Patent Ext. | Applications for patent term extension and any communications relating thereto. |
| Mail Stop PCT | Mail related to applications filed under the Patent Cooperation Treaty. |
| Mail Stop Petition | Petitions to be decided by the Office of Petitions including petitions to revive and petitions to accept |

| | |
|--------------------------------------|---|
| | late payment of issue fees or maintenance fees. |
| Mail Stop PGPUB | Correspondence regarding publication of patent applications not otherwise provided, including requests for early publication made after filing, rescission of non-publication request, corrected patent application publication, refund of publication fee. |
| Mail Stop Post Issue | In patented files: requests for changes of correspondence address, powers of attorney, revocations of powers of attorney, withdrawal of attorney and submissions under 37 CFR 1.501. Designation of, or changes to, a fee address should be addressed to Mail Stop M Correspondence. Requests for Certificate of Correction need no special mail stop, but should be made to the attention of Certificate of Correction Branch. |
| Mail Stop RCE | Requests for continued examination under 37 CFR 1.114. |
| Mail Stop Reconstruction | Correspondence pertaining to the reconstruction of lost patent files. |
| Mail Stop <i>Ex Parte</i> Reexam | Requests for Reexamination for original request papers only . |
| Mail Stop <i>Inter Partes</i> Reexam | Requests for <i>Inter Partes</i> Reexamination for <i>original</i> request papers and for all <i>subsequent</i> correspondence other than correspondence to the Office of the Solicitor (see 37 CFR §§ 1.1(a)(3) and 1.302(c)). |
| Mail Stop Reissue | All new and continuing reissue application filings. |
| Mail Stop Sequence | Submission of the computer readable form (CRF) for applications with sequence listings, when the CRF is not being filed with the patent application. |

ADDRESS FOR TRADEMARK MAIL

The box designations previously listed in Trademark Manual of Examining Procedure, Section 305.01 are no longer in use. See Change of Address for Mailing Trademark Correspondence, which is posted on the USPTO Internet web site at:

<http://www.uspto.gov/web/trademarks/tmmailingaddressnotice.htm>. Please address mail to be delivered by the United States Postal Service (USPS) as follows:

Commissioner for Trademarks
2900 Crystal Drive
Arlington, Virginia 22202-3514

**SPECIAL MAIL STOPS APPLICABLE TO
BOTH PATENT AND TRADEMARK MAIL**

The following special mail stop designations are applicable to both patent and trademark related mail, and the recommendations for "Special Mail Stops for Patent Mail" (above) should be followed for the types of mail listed below.

Please address mail to be directed to a mail stop identified below to be delivered by the United States Postal Service (USPS) as follows (unless otherwise instructed):

Mail Stop _____
Director of the US Patent and Trademark Office
PO Box 1450
Alexandria, VA 22313-1450

| Mail Stop Designations | Explanation |
|-------------------------------|--|
| Mail Stop 3 | Mail for the Office of Personnel from NFC |
| Mail Stop 6 | Mail for the Office of Procurement. |
| Mail Stop 8 | All papers for the Office of the Solicitor except communications relating to pending litigation and disciplinary proceedings; papers relating to pending litigation in court cases shall be mailed only to Office of the Solicitor, PO Box 15667, Arlington, VA 22215 and papers related to pending disciplinary proceedings before the Administrative Law Judge or the Director shall be mailed only to the Office of the Solicitor, PO Box 16116, Arlington, VA 22215. |
| Mail Stop 11 | Mail for the Electronic Ordering Service (EOS). |
| Mail Stop 13 | Mail for the Employee and Labor Relations Division. |
| Mail Stop 16 | Mail related to refund requests, other than requests for refund of a patent application publication fee. Such requests should be directed to Mail Stop PGPub. |
| Mail Stop 17 | Invoices directed to the Office of Finance. |
| Mail Stop 24 | Mail for the Inventor's Assistance Program, including complaints about Invention Promoters. |
| Mail Stop 171 | Vacancy Announcement Applications. |
| Mail Stop Assignment | All assignment documents, security interests, and other |

| | |
|-----------------------------------|---|
| Recordation Services | documents to be recorded in the Assignment records. Note that documents with cover sheets faxed to 703-306-5995 are processed much more quickly than those submitted by mail. |
| Mail Stop Congressional Relations | Mail for the Office of Congressional Relations. |
| Mail Stop Document Services | All requests for certified or uncertified copies of patent or trademark documents. |
| Mail Stop EEO | Mail for the Office of Civil Rights. |
| Mail Stop Enforcement | Mail for the Office of Enforcement. |
| Mail Stop Interference | Communications relating to interferences and applications and patents involved in interference. |
| Mail Stop International Relations | Mail for the Office of International Relations. |
| Mail Stop M Correspondence | Mail to designate or change a fee address, or other correspondence related to maintenance fees, except payments of maintenance fees in patents. See below for the address for maintenance fee payments. |
| Mail Stop OED | Mail for the Office of Enrollment and Discipline. |

Maintenance Fee Payments

Payments* of maintenance fees in patents not submitted electronically over the Internet at www.uspto.gov should be mailed to:

United States Patent and Trademark Office
PO Box 371611
Pittsburgh, PA 15250-1611

Deposit Account Replenishments

To send payment* to replenish deposit accounts, send the payments to:
Director of the United States Patent and Trademark Office
PO Box 70541
Chicago, IL 60673

* Payment of maintenance fees in patents (Attn: Maintenance Fee) and deposit account replenishment (Attn: Deposit Accounts) using hand-delivery and delivery by private courier may be made to:
Director of the United States Patent and Trademark Office

Attn: _____

One Crystal Park
2011 Crystal Drive, Suite 307
Arlington, Virginia 22202.

Questions regarding the information provided on this page should be directed to: Darnell Jayne, Legal Advisor in the Office of Patent Legal Administration, by telephone at (703) 308-6906 or by e-mail addressed to PatentPractice@uspto.gov.

28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **WILLIAM D CUMMING** whose telephone number is **703-305-4394**. The examiner can normally be reached on Monday-Wednesday 10:30am to 8:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **WILLIAM TROST** can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wdc



UNITED STATES
PATENT AND
TRADEMARK OFFICE

William Cumming
Primary Patent Examiner
(703) 305-4394
(703) 746-6075 Fax
william.cumming@uspto.gov


WILLIAM CUMMING
PRIMARY EXAMINER
GROUP 2600